IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A tunnel junction device, comprising:

~~an~~ a first electrode~~,~~;

~~another~~ a second electrode~~,~~; and

an electrically insulating layer arranged between ~~these electrodes~~the first electrode and the second electrode~~,~~;

wherein:

the ~~former~~ first electrode ~~comprising~~ comprises an $A_{1-x}B_xM_{1-y}M'_yO_{3-\delta}$ oxide ferromagnetic (including ferrimagnetic) electroconductive solid material, wherein:

x and y satisfy the conditions: $0 \leq x \leq 1$ and $0 \leq y \leq 1$;

δ represents an oxygen deficiency;

~~"A"~~A represents an element selected from the group consisting of Ca, Sr, Ba, and other alkaline earth elements, La and other rare earth elements, and elements including Y, Bi, and Pb;

B represents ~~another~~ an element ~~which~~ that is different from ~~"A"~~A, selected from the group consisting of Ca, Sr, Ba, and other alkaline earth elements, La and other rare earth elements, and elements including Y, Bi, and Pb;

M represents an element selected from the group consisting of ~~a transition metal element such as~~ Mn, Fe, Co, Ni, or Cu and other transition metal elements; and

M' represents ~~another~~ an element selected from the group consisting of Mn, Fe, Co, Ni, or Cu and other transition metal elements ~~element such as Mn, Fe, Co, Ni, or Cu~~, M' being different from "M~~",~~ "; and

the ~~other~~ second electrode ~~comprising~~ comprises an $A_{1-x'}B_{x'}M_{1-y'}M'_{y'}O_{3-\delta}$ oxide ferromagnetic (including ferrimagnetic) electroconductive solid material having a component

ratio y' ~~being~~ that is not ~~not~~ equal to y, wherein x' and y' satisfy the conditions: $0 \leq x' \leq 1$, $0 < y' \leq 1$~~; and δ represents an oxygen deficiency~~.

Claim 2 (Currently Amended): The tunnel junction device according to claim 1, ~~comprising two electrodes, and an electrically insulating layer arranged between these electrodes,~~ wherein:

~~one of~~ the ~~two electrodes~~ first electrode is an electrode comprising an $A_{1-x}B_xMnO_{3-\delta}$ oxide as a ferromagnetic (including ferrimagnetic) electroconductive solid material~~, wherein x satisfies the condition: $0 \leq x \leq 1$; δ represents an oxygen deficiency; "A" represents an element selected from the group consisting of Ca, Sr, Ba, and other alkaline earth elements, La and other rare earth elements, elements including Y, Bi, and Pb; and B represents another element which is different from "A", selected from the group consisting of Ca, Sr, Ba, and other alkaline earth elements, La and other rare earth elements, elements including Y, Bi, and Pb, and wherein~~ ; and

the ~~other~~ second electrode is an electrode comprising ~~another~~ an $A_{1-x'}B_{x'}Mn_{1-y'}Ru_{y'}O_{3-\delta}$ oxide as a ferromagnetic (including ferrimagnetic) electroconductive solid material~~, wherein x' and y' satisfy the conditions: $0 \leq x' \leq 1$, $0 < y' \leq 1$; and δ represents an oxygen deficiency~~.

Claim 3 (Currently Amended): The tunnel junction device according to claim 2, ~~comprising two electrodes, and an electrically insulating layer arranged between these electrodes,~~ wherein:

~~one of the two electrodes~~ the first electrode is an electrode comprising a $La_{1-x}Sr_xMnO_{3-\delta}$ oxide as a ferromagnetic (including ferrimagnetic) electroconductive solid material, wherein x satisfies the condition: $0.2 \leq x \leq 0.5$~~; and δ represents an oxygen deficiency,~~ ; and

~~wherein~~ the ~~other~~ second electrode is an electrode comprising a $La_{1-x'}Sr_{x'}Mn_{1-y}Ru_yO_{3-\delta}$ oxide as a ferromagnetic (including ferrimagnetic) electroconductive solid material, wherein x' and y satisfy the conditions: $0.2 \leq x' \leq 0.5$, $0 < y \leq x$~~; and δ represents an oxygen deficiency~~.

Claim 4 (Currently Amended): The tunnel junction device according to claim 3, ~~comprising an~~ wherein:

the first electrode is arranged on or above a substrate supporting the device~~;~~; ~~another~~

the second electrode is arranged above the first electrode; ~~with the interposition of an~~ and

the electrically insulating layer is interposed between the first electrode and the second electrode~~, wherein the former electrode comprises a $La_{1-x}Sr_xMnO_{3-\delta}$ oxide as a ferromagnetic (including ferrimagnetic) electroconductive solid material, wherein x satisfies the condition: $0.2 \leq x \leq 0.5$; and δ represents an oxygen deficiency, and wherein the latter electrode comprises a $La_{1-x'}Sr_{x'}Mn_{1-y}Ru_yO_{3-\delta}$ oxide as a ferromagnetic (including ferrimagnetic) electroconductive solid material, wherein x' and y satisfy the conditions: $0.2 \leq x' 0.5$, $0 < y \leq x$; and δ represents an oxygen deficiency~~.

Claim 5 (Currently Amended): The tunnel junction device according to claim 1, wherein the electrically insulating layer is an electrically insulating layer comprising an $A_{1-x}B_xM_{1-y}M'_yO_{3-\delta}$ oxide, wherein:

x and y satisfy the conditions: $0 \leq x \leq 1$ and $0 \leq y \leq 1$;

δ represents an oxygen deficiency;

~~"A"~~ A represents an element selected from the group consisting of Ca, Sr, Ba, and other alkaline earth elements, La and other rare earth elements, and elements including Y, Bi, and Pb;

B represents ~~another~~ an element which is different from ~~"A"~~A, selected from the group consisting of Ca, Sr, Ba, and other alkaline earth elements, La and other rare earth elements, and elements including Y, Bi, and Pb;

M represents an element selected from the group consisting of Mn, Fe, Co, Ni, or Cu and other ~~a~~ transition metal elements~~element such as Mn, Fe, Co, Ni, or Cu~~; and

M' represents an element selected from the group consisting of Mn, Fe, Co, Ni, or Cu and ~~another~~ other transition metal ~~element~~ elements~~such as Mn, Fe, Co, Ni, or Cu~~, M' being different from "M".

Claim 6 (Previously Presented): The tunnel junction device according to claim 1, wherein the electrically insulating layer comprises $SrTiO_{3-\delta}$, wherein δ represents an oxygen deficiency.

Claim 7 (Previously Presented): The tunnel junction device according to claim 1, wherein the electrically insulating layer comprises $LaA1O_{3-\delta}$, wherein δ represents an oxygen deficiency.

Claim 8 (Currently Amended): The tunnel junction device according to claim 1, wherein at least one of the ferromagnetic (including ferrimagnetic) electroconductive solid ~~materials~~ material constituting the ~~electrodes~~first electrode, the ferromagnetic (including ferrimagnetic) electroconductive solid material constituting the second electrode, and a solid material constituting the electrically insulating layer ~~arranged between these electrodes~~ is prepared by pulsed laser deposition.

Claim 9 (Currently Amended): The tunnel junction device according to claim 8, wherein:

the solid material prepared by pulsed laser deposition is a $La_{1-x}Sr_xMn_{1-y}Ru_yO_{3-\delta}$ oxide solid material, wherein x and y satisfy the conditions: $0.2 \leq x \leq 0.5$, $0 < y \leq x$, and δ represents an oxygen deficiency;

the solid material is prepared ~~as the ferromagnetic (including ferrimagnetic) electroconductive electrode~~ by pulsed laser deposition is prepared using such a material that the resulting $La_{1-x}Sr_xMn_{1-y}Ru_yO_{3-\delta}$ oxide~~, wherein x and y satisfy the conditions: $0.2 \leq x \leq 0.5$, $0 < y \leq x$; and δ represents an oxygen deficiency,~~ shows a lattice constant of 3.82 angstroms to 3.87 angstroms.

Claim 10 (Currently Amended): The tunnel junction device according to claim 8, wherein:

the solid material prepared by pulsed laser deposition is a $La_{1-x}Sr_xMn_{1-y}Ru_yO_{3-\delta}$ oxide solid material, wherein x and y satisfy the conditions: $0.2 \leq x \leq 0.5$, $0 < y \leq x$, and δ represents an oxygen deficiency; and

the solid material is prepared ~~as the ferromagnetic (including ferrimagnetic) electroconductive electrode~~ by pulsed laser deposition is prepared at a substrate temperature of 750°C to 900°C at an atmospheric oxygen pressure of 133 mPa (1 mTorr) to 13.3 Pa (100 mTorr).